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IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF FLORIDA

THE CORING COMPANY on behalf of itself and all others similarly situated

Plaintiffs,

VS.

APPLE INC.

&

MR. TIM COOK

Defendants.

Case No. 21-cv-

SHERMAN ANTITRUST CLASS ACTION

COMPLAINT FOR DAMAGES AND INJUNCTIVE RELIEF

DEMAND FOR JURY TRIAL

PLAINTIFFS' COMPLAINT FOR DAMAGES AND INJUNCTIVE RELIEF

I. INTRODUCTION

1. In December 2021, The Coring Company ("Coring") developed an innovative app distribution platform meant to replace Apple's App Store with its malware and censorship-resistant "App Place." Using open source, blockchain, and professional audit capabilities, the App Place by Coring could nearly eliminate the rogue algorithms and unfair "curation" of competitors that plagues the App Store, and which famously lead to an entire political party being squelched when Apple shut down Parler during the presidential transition period.

- 2. Problematic algorithms, or app source code, fall under two basic categories. First are objectively harmful malware, spyware, illicit content redirects, and privacy invading phishing type attempts. The second, more complex category, are unethical algorithms, often veiled as "trade secrets" by companies like Instagram and Facebook, and criticized for encouraging addicting online behaviors, spreading false information, facilitating unnecessary spending and ad clicking, increasing community discord, and other subjective woes.
- 3. Apple purports their own App Store's competitive advantage is in screening for the first type of bad algorithms. Apple has advanced this argument in numerous anti-trust cases, and largely won the highly publicized *Epic* trial on the basis that such "safety" defenses were non-pretextual. Apple concedes that some apps in the first category slip through their app review process. As for the second category, Apple's app review process does not screen source code, and therefore has very limited ability to screen for unethical, secret, and surreptitious subjectively 'corrupt' algorithms.
- 4. Enter the "App Place" by Coring, which virtually eliminates the aforementioned drawbacks, and hence offers the "best app store ever made for iOS." In the App Place, developers submit their source code itself to the platform. They then have the choice to either have the code professionally audited by certified computer code examiners, like a patent examiner examines a patent application, or to distribute the app in compiled open source format, like Github has done for years for programmers. For many apps, distributing in open source is preferable as it gains trust amongst users, and in some cases, is the only way to prove secure "end-to-end" encryption and other data safety chain-of-custody proofs. This would enable an entire class of apps that is currently not possible on iOS, for example,

a certified smart contract front-end. Other apps may keep their source code more closely guarded, and instead pay certified auditors to review the code, and transcribe in simple English the functionality of the algorithms. In either scenario, malware and surreptitious, unethical algorithms will never be passed on to an end-user in the App Place; the open source code will plainly reveal itself in user reviews, and/or the auditor will discover that the algorithm doesn't function as specified in the developer app submission. Community monitoring of open-source forks would attribute them to original creators, and the App Place would direct ad revenues and in-app purchases accordingly. Hence, even in the open-source method, work product is protected.

- 5. Censorship is similarly a non-issue in the App Place. Too often, we hear of Apple "curating" apps and blocking them under the false pretense of safety. Once code is audited, or open-source, the subjective curation review by Apple becomes unnecessary. Standards for rejection will be based on objective criteria, rather than Apple's murky and often illegal under Sherman and RICO perfunctory decisions. A dishonest app will be disclosing its wrongdoing immediately in the source code, and subject it to immediate law enforcement scrutiny.
- 6. In the jury trial, experts will leave little doubt that the App Store is an outdated distribution platform that pales in comparison to the potential of App Place, and other similar incumbents. Apple's antitrust safety defense is fatally flawed when one considers newer app distribution technologies such as Coring's App Place. Who would want to go back to the App Store, after they appreciated the transparency of the App Place?
- 7. The market for innovating app stores is seemingly without limit. In China, competitor app stores for the Android platform are nearly an order of magnitude larger than the original.

Apple's own App Store draws in nearly \$20 billion a year in commissions, making it the largest consumer transaction platform in history. *Epic* raised the issue of innovative app stores actually improving app safety, but Apple's home-field Northern California district found that *Epic* failed to prove this matter in the relevant international games market. Here, Coring's App Place specifically applies to non-gaming, United States apps, hence the matter is one of first impression. Moreover, the App Place has a specific technology ready for examination by the jury, whereas *Epic* only vaguely posited that one *could* improve the safety of the App Store.

- 8. The damage to our economy from bottlenecking app distribution is vast. Assuming competing app stores like App Place could represent 5x the size of the App Store, as they do in China, there is a market for \$100 billion annually in App Store transactions. What's more, the App Place will reduce commissions from Apple's 30%, to a non-usury 6% level. As adjusted, transaction damages alone would accrue \$20 billion annually to app store competitors. That does not include the damages to censored app developers, which is estimated to be at least \$30 billion annually. Anticipating two years to trial, this class action seeks to redress nearly \$300 billion in damages on a treble-award basis.
- 9. Interestingly, just last week "The Information" journal revealed that Apple's Tim Cook bribed the Chinese government with \$275 billion to exempt it from regulation in that country, including, upon information and belief, antitrust enforcement. This offers proof that Apple knows the precise value of bottlenecks to competition caused by the App Store's archaic, and monopolistic, platform, and agrees with Plaintiffs on the approximate damage to competition. Notably, in Georgia, located in the same circuit as this Court, Apple is alleged to have entered a *quid pro quo* with state legislators to drop antitrust enforcement

- or face HBCU funding rescindment. In short, Apple pays big money to ensure that the App Store isn't regulated, and competitors like App Place aren't given a chance to flourish.
- 10. The Coring Company was founded this month, and has no prior relationship with Apple, Inc. as a developer or end-user. As a holder of a patent that also issued just this month, awarded to a Florida inventor, Coring asserts antitrust and patent infringement claims as a Florida entity. It is hoped that Coring can bring this nationally important debate concerning app market competition to the Eleventh Circuit, where case law is properly aligned with the Sherman Act's original intent.
- 11. The Sherman Act prohibits monopolization of any part of the trade or commerce among several States, or with foreign nations. Likewise, the Sherman Act prohibits every contract or conspiracy in restraint of trade among several States, or with foreign nations. Apple has restricted trade, communication, and free information exchange, all in violation of the Sherman Act, when it excluded competing app distributers, such as Plaintiff, from the iOS ecosystem.

VENUE

- 12. Venue in the Southern Florida District is proper under 15 U.S.C. § 22, which states that any suit proceeding under antitrust laws against a corporation may be brought in any district where it transacts business. Apple transacts business in Florida.
- 13. This Court has subject matter jurisdiction, pursuant to the Class Action Fairness Act of 2005, 28 U.S.C. 1332 (d), because the proposed class of Apple shareholders, US citizens, and/or App distributors exceeds 100 members, the amount in controversy exceeds \$5,000,000, and at least one member of the class of plaintiffs is a citizen of a state different from Defendant Apple, a California corporation. Jurisdiction in this Court for a permanent

injunction arises under 28 U.S.C. § 1331, for federal questions presented pursuant to 15 U.S.C. § 26 (Clayton Antitrust Act). Diversity jurisdiction is invoked pursuant to 28 U.S.C. § 1332 because the parties reside in different districts and the amount in controversy exceeds \$75,000.

II. PARTIES

- 14. Plaintiff The Coring Company ("Coring") is a Florida C Corporation. Coring was founded in early December 2021 by a group of former Apple enthusiasts who hope to use technological innovation and advocacy to bring back the core values of this undisputed American success story. Coring intends to raise public awareness about the negative externalities created by Apple's conduct. As an intellectual property holding company, Coring's portfolio includes the App Place smartphone app distributer, and the web caller-ID patent, United States Reissue Patent #48,847. Coring's founders and advisors possess a diverse background of accomplishments in the sciences, medicine, law, and computing fields. Coring will actively recruit additional coalition members to join in support of this class action. As a founding project, Coring prototyped a Censorship-Free App Distribution Platform meant to immediately redress the growing threat of app censorship that now plagues developers, end users, and even entire political parties.
- 15. Defendant Apple Inc. is a California corporation with its principal place of business in Cupertino. Apple is the largest public company in the world, with a current market capitalization of approximately \$3 trillion. Apple designs, markets, and sells smartphones (the iPhone) and computers (the Mac), which functionally rely upon and profit immensely from access to the taxpayer-funded national internet backbone. Apple owns and operates the App Store, which serves as the only retail store for iOS applications (apps) that execute

commerce and information flow over the national internet. No other app distributers, such as Plaintiff's App Store, are permitted under Apple's exclusionary iOS design. Because the App Store rejects some 40,000 apps per week, it causes millions of person-years of economic losses, and a vastly sub-optimal "network effect" of the Internet.

16. Defendant Mr. Tim Cook is CEO of Apple, Inc. Mr. Cook's place of employment is at Apple headquarters in Cupertino, CA. Upon information and belief, he is a California resident. On December 7, 2021, "The Information" journal broke the story that Mr. Cook entered into a secret agreement with the Chinese government in 2016. The agreement, also referred to as a bribe, diverted some \$275 billion in Apple shareholder profits to China, without disclosing the fact to Apple's Board or shareholders. The agreement obtained no specific consideration for Apple – i.e., China did not promise anything in return. As such, the agreement constituted a one-sided bribe, made without consent of the corporation, and with the intent to defraud and dilute shareholders from nearly three years of corporate earnings. Mr. Cook, upon information and belief, also directed lobbyists in Georgia to engage in illegal *quid pro quo* HBCU funding threats. As such, Mr. Cook may be subject to pending RICO and Sherman statutory claims.

III. <u>FACTUAL HISTORY</u>

- 17. Introductory paragraphs preceding this paragraph are asserted herein and responsive pleading is hereby noticed as necessary.
- 18. Apple operates the App Store, and has exclusive control over iOS applications and their ability to access the national internet backbone. The national TCP/IP internet backbone was built, at least in part, using taxpayer dollars for the military ARPANET. Apple has profited immensely from the existence of the national internet backbone. Without the

internet, and the taxpayer dollars that built it, Apple would not enjoy the \$3 trillion valuation it has amassed. The Apple smartphone ecosystem is primarily a graphical user interface (GUI) software (iOS) and hardware amalgamation connecting users to the national internet backbone.

- 19. Over the years, Apple has taken a concerning, increasingly authoritarian approach to the App Store and access to the iOS userbase (the owners of the "network effect" of hundreds of millions of interconnected smartphones) and has rejected and/or disallowed significant numbers of third-party applications, including all rival app distributers such as App Place.
- 20. There has been a recent international consensus that Apple engages in anticompetitive conduct to monopolize the US App Distribution marketplace. This is part of an emerging trend of global public interest in regulating "Big Tech." The world rapidly adopted smartphone internet connectivity over the past decade. This has lead to vast sociological implications which we are in the very early stages of fully understanding. There are at least several emerging antitrust proceedings of particular relevance to this case, that combined form an international consensus that the App Store harms competition and innovation. These include:
 - The bipartisan Senate "Open App Markets Act" introduced last summer by Senior Senator Blumenthal. The Act's Section 3(d) on "interoperability" requires the App Store allow direct app loading and eliminate search ranking self-preference. As such, the Act attempts, through legislation, to obtain the same App Store changes as the preliminary & permanent injunctions requested in this Amended Complaint.
 - The "Investigation of Competition in Digital Markets" majority staff report and recommendation by the United States House of Representatives Subcommittee on

Antitrust, herein referred to as the "House report." The facts uncovered by the House report applicable to Apple are hereby wholly incorporated herein. The report concludes that courts have had disregard for the legislative intent of Sherman, and too narrowly construe it in cases involving Big Tech.

- A European Commission investigation into the App Store, launched in June 2020. ("The EC investigation"). Proposed legislation exists in the EU and the UK which would mandate App Store modifications identical to this complaint and the bipartisan US senate bill.
- 21. The "Investigation of Competition in Digital Markets" majority staff report and recommendation by the United States House of Representatives Subcommittee on Antitrust provides compelling support and evidence supporting the Plaintiffs and class members claims. The report asserts that Apple's control over iOS provides it with gatekeeper power over software distribution on iOS devices. The report declares Apple has "monopoly power over distribution of software applications on iOS devices." The report quotes Apple executives as stating that Apple is "not subject to any meaningful competitive constraint" in this channel. This results in "supra-normal" profits according to the report.
- 22. Apple benefits immensely from a ranking system that favors their own rival apps, according to the report. Some searches reveal "14 Apple apps before showing results from rivals." The report documents that Apple "holds [competitor apps] to a different standard" than its own apps, which is precisely what happened to Plaintiff's patent licensees, and other class members. Such ranking unfairness has directly harmed Plaintiffs and class members.
- 23. Described is Apple's history of "closely monitoring the success of apps in the App Store, only to copy the most successful." Apple "takes other companies innovative features,"

- which was the case with the '847 patent. In sum, Plaintiffs and class members have experienced such anti-competitive behavior as described in the report.
- 24. The House report has an entire section devoted to Apple's "excluding rival apps." This directly applies to Apple's outright ban of all app distribution software, such as App Place. Many class members have suffered the same fate, resulting in thousands of person-years and tens of billions of dollars of damages.
- 25. The report describes how apple has "absolute discretion" in approving apps, resulting in "complete tyranny." As stated in the introduction, the app review process is anything but perfect; the House Report says "different reviewers" interpret same apps "differently" with "intentionally...vague" guidelines that consist of "moving goal posts" and "unwritten rules." The report describes the frequent delays of weeks or months as "insufferable."
- 26. The Subcommittee findings re Apple's anti-competitive behavior, approximately ten pages in length, are hereby asserted by Plaintiffs and class members as if fully pleaded herein.
- 27. Plaintiff's App Place is a competitor with Apple's App Store.

Coring Lead Plaintiff – App Place Facts

- 28. It is a well-established fact that Apple does not like competition with the App Store, and perhaps more importantly, desires absolute power over what applications every iPhone user about two-thirds of the US population, does with their smartphone.
- 29. While this may have been acceptable to many in the early days of the iPhone, it is now a technological crisis. Justice Clarence Thomas has been unambiguous in stating that the time has come for companies like Apple to be viewed as essential facilities that are in violation of Sherman Act: https://www.cnbc.com/2021/04/05/justice-thomas-suggests-regulating-tech-platforms-like-utilities.html

- 30. But a landmark *Epic* case in the Ninth Circuit lost their attempt to bring a rival app store to the markets. In that case, the Judge found a marketplace neither the Plaintiff not Apple had pleaded the international games market, and denied Sherman claims but upheld a state Unfair Competition Law. Just last week, the Ninth Circuit put a stay on that small victory for web freedom.
- 31. As stated in the introduction, the case was largely won by Apple arguing the App Store is the best and only way to safely distribute apps.
- 32. But this is false. The App Store is an archaic model, and even if it isn't, would benefit from competition.
- 33. But competition is barred by Apple. Consider the TrustWallet Dapp App Market. Apple removed the Smart Contract Dapp market, much to the despair of that developer: https://support.trustwallet.com/en/support/solutions/articles/67000670234-dapp-browser-removal-on-ios-version-of-trust-wallet
- 34. That developer probably had little choice, having signed the DPLA, and unwilling to risk their remaining business. As a result, they apparently capitulated to Apple's DPLA. Indeed, challenging the DPLA in court cost *Epic* around \$60 million.
- 35. A Dapp Market would have allowed the important smart contract realm to flourish with iOS users. That technology has great potential to improve the stability and safety of the internet. In short, Apple blocked the Dapp Market because it wanted power over Dapps even if that cost society as a whole, in terms of safety.
- 36. Apple, undoubtedly, understands the power of competing App Stores. Indeed, their own Apple Arcade is the *only* competing App Store permitted on the platform. In short, Apple

- is a hypocrite: they block innovative app stores like TrustWallet, to advance their own agenda, i.e. Apple Arcade.
- 37. There exist many possible improvements to the App Store in terms of user safety and experience.
- 38. The TrustWallet, Epic, and Plaintiff's own App Place are examples of such potential improvements.
- 39. Apple is a competitor with each of these platforms, as both a developer and app distribution operator.
- 40. App Place's specification for a consumer open source and audited/examined algorithm submission platform would bring substantial, tangible increases in safety, app quality, and app selection, if Apple permitted it. Plaintiff anticipates patent pending status on the App Place specification no later than the date of the preliminary injunction hearing.
- 41. Instead, it is clear from TrustWallet and Epic's experience that the App Place would not even be considered by Apple.
- 42. Some products, like Microsoft Office, trusted for four decades, would likely not be the ideal candidate for an open source market like App Place. More likely, small, but critical, utilities like Dapps and other services, like Coronavirus Reporter, an epidemiological research tool, would thrive on the App Place. Consumers and developers both suffer from the loss of the App Place option. Indeed, even Microsoft has recently lifted all restrictions to competing app stores on its own platforms, calling the practice "unfair." Google has, since Android's inception, always allowed any developer to act as a distributor. So has the MacOS, and every other major computing platform in history. In short, Apple stands stubbornly alone against its peers, as well as the US Congress, Senate, and even members

of the Supreme Court. But somehow, they have been able to influence state legislators, China, and the Ninth Circuit. That practice must be subject to discovery in this lawsuit and brought to an end.

Coring Lead Plaintiff – '847 Patent Facts

- 43. On October 14, 2014, the United States Patent and Trademark Office ("USPTO") duly and legally issued U.S. Patent No. 8,861,698 ("'698 Patent"), entitled "Post-Page Caller Name Identification System." That patent overcame substantial litigation in the Federal Circuit and years of scrutiny by the USPTO, to resolve a common obstacle for software patents *Alice* non-abstraction. The patent reissued on December 7, 2021 as Reissue Patent #48,847.
- 44. Coring obtained ownership of the US Reissue Patent #48,847 in December 2021. Coring's technology allows a mobile phone user to identify the name associated with a particular phone number through a reverse lookup. But unlike reverse phone lookup internet technology available prior to the invention, Coring's technology connects an internet search to phone carrier databases on the Public Switched Telephone Network (PSTN), to identify caller name information.
- 45. The '847 Reissue Patent is currently in full force and effect and is entitled to a presumption of validity under the law.
- 46. Coring and the inventor own all rights, title, and interest in the '847 Patent, including the right to sue for past, present, and future infringement of that patent.
- 47. The '847 Patent describes and claims a novel convergence of two telephone network related technologies, namely SS7 Caller Name ID ("CNAM"), and internet based reverse telephone number search.

- 48. Originally, the Baby Bells disbursed paper phone books to each landline customer, which served as the primary mode of looking up a phone number by the customer's name. In the 1980s, telephone companies began offering "caller ID" as an add-on feature for a landline telephone subscription. Caller ID was supported by CNAM, which at that time was reaching widespread use by the carries. CNAM allowed a carrier to determine the name of the calling party and display that to the called party for calls between landline phones. Prior to that time, a called party generally had no way to trace the name of a caller; calls were anonymous. CNAMs were stored in a relatively small number of databases managed by the "Baby Bell" companies.
- 49. Upon information and belief, in 1997, the largest competing reverse phone services copied the Baby Bell phonebooks onto their internet searchable database. This had the effect of allowing reverse telephone number lookups via the internet by entering a phone number to search for its owner, without adding a "Caller ID" feature to a telephone subscription. The limitation of this method, of course, was that it only included listed numbers for landlines contained in public telephone books, and did not include cell phone numbers. It also relied on data from a single snapshot of time, and could not account for new telephone numbers or changed numbers as those additions or changes occurred. The reverse search competitors charged for the service. Over time, they added other data sources to its database of information, to expand its reverse phone lookup service, but what it lacked was access to a large swath of cell phone numbers and associated names.
- 50. Although mobile phones, and particularly smart phone technology, has proliferated in the last two decades, cell phone Caller ID technology did not, presumably because CNAM was based on the Public Switched Telephone Network (PSTN). As a result, many mobile

phones today will display "UNKNOWN CALLER", or a city name e.g., "W PALM BEACH" instead of the name of the person who owns the account for the calling number. In short, despite great advances in the past decade or so related to mobile phone technology, Caller Name ID was often left behind.

- 51. The lack of CNAM information on mobile phones created a less than ideal situation for the average consumer. Mobile phone owners often do not know who is calling them, and as noted, reverse search technology of copying phone books onto the internet suffered from the drawback of lacking mobile phone numbers.
- 52. This left reverse phone search users with little recourse for mobile telephone numbers. They responded by introducing expensive "upcharge" subscriptions to access credit report files, which include most phone numbers. The customer of such service typically agrees (whether they mean to or not) to a recurring monthly subscription of approximately \$19/month.
- 53. In 2013, the patent's inventor conceived of and invented a free technology that bridged the gap between CNAM and internet reverse search. He filed for and obtained a patent on his invention which is known as the Post Page Caller Name Identification System. It is described and claimed in the '847 Patent. In particular, the '847 Patent describes a system and method in which a user can input a telephone number into a webpage or mobile phone app, separate and apart from its phone carrier, and return name information associated with the queried phone number. To accomplish this in practice, the patent licensee uses an SS7 query to a CNAM database in real time to obtain the caller name information.
- 54. In addition to obtaining patent protection the inventor set about to create the computer code required to make his invention work. He worked with third parties to gain access to CNAM,

- and with Apple, Google, and other App providers to ensure that his App was not only successful, but was implemented to protect the privacy of users and enhance their experience.
- 55. The inventor released his "Caller-ID" app onto the Apple iTunes App Store in the summer of 2013. The app has over ten thousand positive user reviews; representative reviews include "finally, a phone search that didn't ask for my credit card number," "far superior to Apple," "the only one that works," "why wasn't this invented ten years ago" and so forth. The app was free, instead generating revenue through advertising rather than direct user payments. As a result, hundreds of millions of users avoided \$19 subscriptions and obtained free caller name ID. The invention created by a Florida resident and specified in the '847 patent resulted in approximately \$100 million in savings to the national economy. It was years ahead of its time in seeking to reduce unwanted subscriptions, which now plague nearly every industry.
- 56. In the summer of 2014, just a year after the inventor introduced his app, and as he began to take away Apple's App Store profits from reverse phone lookups, Apple allowed multiple competing apps on the App Store to infringe the patent.
- 57. In accordance with Apple's App Store terms and conditions, the inventor engaged in the Apple dispute resolution process. In August 2014, he sent an infringement notice to Apple Legal, pursuant to that process, notifying Apple that it believed Apple infringed the '698 Patent.
- 58. According to the Apple App Store process, the next step was for Apple to request evidence from infringing app developers to prove they did not infringe the '698 patent. Upon information and belief, Apple failed to enforce their contractual agreements to investigate

- the infringement, and instead, de-ranked the inventor's app the only licensee of the '847 patent to this date.
- 59. Numerous apps on the App Store now infringe the patent. In particular, these apps are a mobile phone application and system that functions independently of the called party's carrier and device. A user inputs a phone number into an entry field, which could come from any device, to determine who called from that number. When a result is found in a carrier's CNAM database, the infringing apps return a result of up to 15 characters, identifying the name associated with the queried number. Upon information and belief, the 15 character truncation indicates a carrier's CNAM database accessed by SS7, including an SS7 interfacing node. In other cases, a longer result is obtained using LIDB, which is still an infringing behavior.
- 60. Upon information and belief, Apple directly infringes the '847 patent by selling infringing apps directly to consumers, having purchased them as a monopsonist. Upon information and belief, Apple's system includes a third-party CNAM query to return the calling party name requested by the user, which is implemented, used, and operated at and under Apple direction and control.
- 61. Upon information and belief, Apple also induces its users to infringe at least Claims 7 & 8 of the '847 patent. In particular, Apple provides the complete system for reverse phone lookup via an SS7 CNAM query to users, as described above, who place that system into use when they enter a phone number to query.
- 62. Apple has alternatively, infringed contributorily by providing to users a system for reverse phone lookups, described above, that has no non-infringing uses. A proper calculation of damages requires the jury to assess whether or not Apple is a monopolist and/or

monopsonist in the Smartphone App Markets, and thereafter, to apportion the infringing apps accordingly to their rightful owners (Apple vs. the original developer).

Sherman Antitrust Claim Theory

A Relevant Market Exists for US Smartphones

- 63. There is a relevant market for United States smartphone internet access devices ("US Smartphone Market") which encompasses the ubiquitous handheld, portable electronic devices that allow users to perform myriad communications and computing functions, such as browsing the internet, navigating traffic, paying bills, accessing social media, playing games, and streaming videos and music. For many consumers, smartphones have largely replaced laptop and desktop computers for a wide variety of computing tasks. To be useful, a smartphone requires an FCC licensed telephone modem (i.e 5G radio) and an operating system which facilitates the use of apps through code, such as application programming interfaces ("APIs"), which app developers use to create apps that are compatible with the device. Smartphones in the US are made by companies like Apple, Samsung, LG, and Motorola. Apple's products are unique in that they don't have a licensable operating system, rather, they use the proprietary iOS. Smartphones are designed to work on specific frequencies, which vary by country, and hence require regulatory (i.e. FCC) approval.
- 64. Hence, licensed US smartphones operate using carrier frequencies that have been commissioned in this country. Apple iPhones sold in the US have different product SKUs than those sold in China, or Europe, evidencing the different markets for different country-products. The US smartphone market excludes simple cell phones, "flip phones," or feature phones, or other electronic devices (such as laptop computers, desktop computers, and gaming consoles, e.g., Nintendo DS, Xbox, PlayStation) that are not mobile smartphones.

As such, Apple and several Android OEMs (LG, Samsung, Motorola) comprise the bulk of the substitutable products in this market. Tablets are considered distinct from this smartphone market, and discovery will further elucidate potential damages in the tablet market.

- 65. Smartphones are essential tools in contemporary American life. They are indispensable to consumers for personal communication, as well as for access to and participation in the modern economy. What makes a mobile device "smart" are the myriad apps that can run on the device and are compatible with its mobile operating system. U.S. consumers now spend more time using mobile devices than they do desktop computers, laptop computers, or televisions. Mobile internet usage is rising while desktop internet usage continues to fall, and U.S. consumers spend nearly 90% of their mobile internet time within apps instead of mobile browsers. They also spend over \$32 billion a year purchasing apps and digital content within apps. App developers likewise invest hundreds of millions of dollars to build and distribute apps for smartphone devices. However, for the reasons to be expounded at trial, such as work/family compatibility, financial constraints, and others to be revealed in discovery, the smartphone market has high barriers to user switching and to market entry. Large companies such as Microsoft and Amazon have attempted to enter and gain viable scale in the market, with only very limited success. As such, Apple currently possesses durable monopoly power in the market for US smartphones, estimated at over 75% by revenue or 65% by quantity.
- 66. In the face of a small price increase (or a small reduction of quality) in smartphone prices, a consumer would be highly unlikely to switch from an Apple device to a substitute for the following reasons. First, the consumer who would switch would lose much of her financial

investment in the previously purchased devices—often hundreds of dollars—as well as digital content consumable only through iOS apps. The consumer may also lose efficient, or any, access to many kinds of data on that device or data associated with those apps. Because of the functional and data integration between devices within the same ecosystem many consumers owning multiple Apple devices would be reluctant to switch to an Android device unless committing to switching all devices—a significant financial commitment. Third, many Americans pay for their devices under installment contracts, limiting their ability to switch mobile ecosystems. These and other costs of switching smartphones cause "lock-in" to the Apple ecosystem, and this leverage is used to exploit further downstream markets.

- 67. Because of this leverage, Apple likewise has monopoly power in all of the downstream and tied product markets to the smartphone foremarket.
- 68. In the US Smartphone market, the United States is a relevant geographic market. As stated, FCC approves a US-version of the iPhone. Apple's product SKU numbers recognize that this is a distinct market geography.

Apple Monopolizes the Market for iOS App Distribution, or Smartphone App Distribution, Alternatively

- 69. Apple has, through its anticompetitive conduct, unlawfully maintained monopoly power in the market for distributing apps on iOS.
- 70. Apps on smartphone devices are akin to software applications on a personal computer. As with applications on a personal computer, some apps may be pre-installed on a smartphone, but consumers typically obtain additional applications or apps to meet their specific needs and preferences.

- 71. On personal computers, application distribution is competitive and diffuse. Consumers download applications from a variety of sources, including the application developer's website or stores on websites such as Amazon, Apple, Microsoft, Google, or Steam.
- 72. On iOS devices, however, Apple has used exclusionary design and restraints of trade to substantially foreclose potential competition from alternative means to download apps, effectively eliminating consumers' choice. The Apple App Store is the only practical means to obtain apps for the vast majority of iOS consumers in the United States.
- 73. Apple possesses a durable monopoly in the iOS App Distribution Market, causing ongoing harm to competition and injury to consumers, developers, and distributors. The Apple App Store's monopoly power is evidenced by (a) its market share and lack of meaningful competition; (b) Apple's large profit margins approaching 44% generally, or higher on the App Store itself and (c) Apple's ability to control the price that consumers must pay to purchase an app on the Apple App Store.
- 74. Apple forces app developers, as a condition of appearing in the Apple App Store, to sign a non-negotiable Developer Distribution Agreement ("DPLA"). The DPLA prohibits developers from developing their own app stores. In other words, no app on the App Store may compete in the iOS App Distribution Market. The DPLA also gives Apple the right to remove and disable any iOS app that Apple determines violates this agreement, and Apple routinely does so.
- 75. Consumers, developers, and distributers participate directly in the market for iOS App Distribution (as direct purchasers, sellers, or market facilitators), and Apple's anticompetitive restrictions are aimed squarely at and cause harm in that market. Apple places restraints on developers specifically to prevent consumers from using alternative

- app distribution channels to impose its supra-competitive commission and "curation" goals on consumers.
- 76. Apple's anticompetitive conduct harms consumers by, *inter alia*, impeding competition among app distributors, which would otherwise innovate new models of app distribution, as Plaintiff did, and offer consumers alternatives to the Apple App Store. Consumers are limited to the App Store, where Apple controls which apps are featured, identified, or prioritized in user searches. Loss of such innovation and choice directly harms consumers, developers, and of course distributors in the iOS App Distribution Market.
- 77. Consumers are also harmed by Apple's anticompetitive practices by way of increased prices and reduced output. As explained above, Apple imposes a supracompetitive commission of up to 30% on the purchase price of apps sold through the Apple App Store, which is much higher than would exist in a market unimpaired by Apple's anticompetitive conduct. For example, in the face of competition, Apple charges substantially lower fees on its Chrome Web Store at only 5% of each app download.
- 78. In addition, developers are harmed by Apple's conduct. Without Apple's supracompetitive commission, consumers would purchase more apps and digital content, and developers would earn greater profits. Developers also lose the opportunity to select from multiple viable options for distributing their apps, which would likely lead to greater sales and better distribution options.
- 79. For example, competition for app distribution could encourage app stores to create more innovative ways for developers to advertise or for consumers to discover new apps they may enjoy. Competition might also encourage app stores to specialize for certain segments—like education, games, fitness, career development, and others—which would

make niche apps more discoverable. Instead, to attract users, many app developers must also purchase Apple's App Store (and other) advertisements, further reducing developers' potential profits.

The Market for iOS App Distribution, or Smartphone App Distribution, Is a Relevant Antitrust Market

- 80. There is a relevant product market for the distribution of apps to users of iOS mobile devices (the "iOS App Distribution Market"). There is a relevant product market for the distribution of apps to users of all smartphone mobile devices (the "Smartphone App Distribution Market").
- 81. The market includes all channels by which iOS apps on smartphone devices may be distributed to consumers. This includes the dominant Apple App Store, which accounts for well over 99% of iOS mobile app distribution. It also includes Apple's enterprise application laoder, which allows corporate customers to directly install apps and bypass the App Store. Apple terms this "sideloading," but Plaintiffs emphasize that this was historically just normal "application loading" or "booting" in computing terminology. Competing app stores are not permitted on Apple devices, per their exclusionary iOS design and contracts of adhesion.
- 82. The iOS App Distribution Market does not include mobile distribution of apps that are compatible with other OSs, such as Google Play Store. A monopolist app distributor on iOS mobile devices is not constrained from raising prices, or reducing quality or innovation, by app distribution on Apple's devices (or on any other mobile devices that use an alternative to iOS or on desktop devices), due to market imperfections such as high switching and information costs.

83. In the face of a small price increase (or a small reduction of quality) in app distribution within iOS, a consumer would be highly unlikely to switch to a Google device for three primary reasons. First, the consumer who would switch away from using one or more iOS devices (e.g., smartphone and tablet) to a Google device (or devices) would lose much of her financial investment in the previously purchased mobile devices—often hundreds of dollars—as well as digital content consumable only through iOS apps. The consumer may also lose efficient, or any, access to many kinds of data on that device or data associated with those apps. Because of the functional and data integration between devices within the same ecosystem (e.g., among an iOS phone, iOS tablet, and peripherals like smartwatches, smart home speakers and "internet of things" devices), many consumers owning multiple iOS devices would be reluctant to switch to a Google device unless committing to switching all devices—a significant financial commitment. Second, many Americans pay for their devices under installment contracts, limiting their ability to switch mobile OS ecosystems. Third, even if a consumer is in the market for a new device (or multiple devices), she typically considers many other factors when deciding between an Apple device or one of the many devices that license the Android OS. These factors include the consumer's existing comfort with an OS, any previous investment in apps or other products that are compatible with an OS (e.g., a smartwatch), device design, processing power, and battery life. Different OSs have distinct designs, controls, and functions that consumers learn to navigate and become familiar with over time. These and other costs of switching mobile OSs deter most consumers from switching, and thus availing themselves of the app distribution alternatives available on another mobile OS.

- 84. In addition, a consumer in the market for a new device cannot reliably determine the lifecycle price. In other words, consumers cannot reliably predict all of the future apps or in- app content they may eventually purchase. Even if some consumers believe they can do so, their preferences and patterns of app usage can change over the device's life, especially as new apps and app functionalities emerge. Because consumers typically cannot predict their future costs when purchasing mobile devices, they cannot effectively take Apple's anticompetitive conduct into account when making mobile device purchasing decisions.
- 85. Nonetheless, consumers might attempt to factor Apple's conduct into their decisions to move away from iOS, but Apple has inhibited consumers' ability to make that informed choice. Most consumers are unaware of Apple's supra-competitive commissions, which Apple does not publicize or itemize on its App Store billing statements. Most US consumers are unaware of the vast app store competition in China, where competing app stores on Android increase quality and selection. Apple likewise conceals its anticompetitive technological and contractual constraints that give the Apple App Store an unfair competitive advantage in iOS app distribution. Indeed, Apple has continually made false or misleading representations to consumers and courts regarding iOS's and the App Store's purported "safety," which consumers would reasonably understand to mean that no other app store, like App Place, could protect them better than Apple. There is significant information asymmetry between Apple and consumers, who cannot easily discover and make informed decisions based on Apple's anticompetitive conduct, let alone consent to them simply because they purchase an iOS mobile device.

86. Moreover, the Apple App Store and the Google Play Store do not compete directly, because they and the apps they distribute function with only one mobile OS and cannot work on an incompatible mobile device. As the Majority Staff of the Subcommittee on Antitrust, Commercial and Administrative Law of the House Committee on the Judiciary concluded in its October 2020 report, "Investigation of Competition in Digital Markets," (hereafter referred to as the "House Majority Report"):

"Apps are not interoperable between operating systems—native apps developed for Apple's iOS only work on iOS devices, and native apps developed for Android only work on Android devices. The Apple App Store and the Play Store do not compete against one another. iOS users cannot access the Apple App Store and Android users cannot access the Google Play Store, so the dominance of the App Store is not constrained by the Play Store and vice versa."

- 87. Alternatively, we assert the market for US Smartphone App Distribution, which would include both the App Store, the Play Store, and other app markets. Apple maintains 80% of all app store purchases in the United States by dollar value. Even considering free apps, this marketplace still encompasses 80% of dollar volume, and 65% by app distribution quantity.
- 88. Consumers who purchase Apple devices are locked into iOS and whatever app distribution is available in the Apple ecosystem. Apple's control of iOS gives it special access to Apple App Store consumers that app distribution competitors such as Plaintiff lack and cannot obtain, due to Apple's anticompetitive restrictions discussed below. Under the *Aspen* SCOTUS ruling, Plaintiff is denied an essential facility by a competitor, namely, access to the iOS smartphone device and operating system.

- 89. Apple's market power over app distribution is also not constrained by the Play Store, because for developers, distribution on iOS is not an adequate substitute for distribution on Android. First, apps written for iOS cannot be run on an Android device, and vice versa. The operating systems are written in different programming languages, and each app must be written to be compatible with the underlying OS. Thus, the switching costs of "porting" an existing app to a new OS are large, as the app must be significantly rewritten. Second, most developers of apps that are popular in the United States cannot reasonably choose between iOS or Android but develop their apps for both operating systems, or forego development altogether if unlikely to gain distribution on both platforms. Just as major personal computer software developers like Microsoft and Adobe must create software versions compatible with both the Microsoft Windows OS and Apple macOS to satisfy consumer expectations, major app developers like Netflix, Spotify, Match Group, Facebook, and Epic Games must incur the costs of developing apps compatible with iOS and Android, or their apps would not be accessible by a significant portion of U.S. mobile device users. This is particularly true for apps that facilitate interaction among users (e.g., dating, online gaming, and social media apps) or serve as platforms for two or more groups of users (e.g., digital commerce and ridesharing).
- 90. Because of Apple's anticompetitive conduct, the iOS App Distribution Market is currently dominated by a single method of distribution, the Apple App Store. But for Apple's anticompetitive conduct, the Apple App Store would face real competition from other app stores—such as Plaintiff's—and other methods of app distribution, like direct downloads from developer websites. Apple's successful exclusionary design to quash competition in app distribution has ensured that these alternative methods of distribution now don't even

exist, and the vast majority of app developers and consumers have given up looking for reasonable substitutes for the Apple App Store.

91. To the extent that the iOS App Distribution Market may be or is a two-sided market, which is contradicted by Plaintiff's relevant App Market definition (see below), Apple's anticompetitive conduct harms consumers, developers, and distributers. Apple's exclusionary conduct also reduces overall output by damaging or destroying alternative avenues of app distribution that consumers and developers would otherwise use. Rather than competing on the merits, and creating more efficient, innovative, or less expensive app distribution, Apple simply blocks its competitive threats.

The Relevant Geographic Market is the United States

92. The United States is a relevant geographic market for iOS App Distribution (or, alternatively, US Smartphone App Distribution). The apps available, and desirable, to consumers vary on a country-by-country basis. For instance, app stores frequently have country-specific "storefronts," and U.S. consumers cannot access the storefront available to users in another country. Apple also sets certain app distribution and payment requirements for developers on a country-by-country basis, including in-app sales currency and price range requirements. Legal restrictions on apps vary by country. App distribution markets available in other countries are not reasonable substitutes for app distribution markets in the United States.

The Market for Smartphone Apps, or alternatively, iOS Apps, is a Relevant Antitrust Market

93. To be useful to consumers, a smartphone must be able to run software applications, or "apps." The app market is downstream from the smartphone foremarket. An app cannot

exist or function without a smartphone operating system. Apps let users perform most of the functions associated with mobile devices—tasks like navigation, web browsing, ordering groceries, playing games, and communicating through email and text messaging. A mobile OS facilitates the use of apps through code, such as application programming interfaces ("APIs"), and SDKs ("software development kits") which app developers use to create apps that are compatible with the OS.

- 94. Apps may be free or may be a non-zero price to consumers, but even a free app has a wholesale valuation. Analogously, every film has a price sold to a film studio. A made-for-TV show, free through ad sponsorship or unlimited streaming agreements, has a price paid to its creators by the TV network or streaming service. Likewise, an author is paid for book rights by a publishing house. Apps are thereby priced by either their cost to consumer, or their total net valuation paid to a creator-developer.
- 95. The vast majority of apps are free, such as Facebook, Instagram, Snapchat, Google Search, etc. Defining a relevant market for free apps has been a "challenge," according to an authoritative "Antitrust and Big Tech" report to the United States Congress (full report, incorporated herein by reference, available at https://sgp.fas.org/crs/misc/R45910.pdf). As the report explains:

"[Antitrust experts] maintain that antitrust law has an important role to play in zero-price markets. Some of these commentators have argued that zero-price transactions are not in fact "free" to consumers, and that consumers ultimately "pay" for putatively "free" goods and services with both their attention and personal data. According to this line of argument, many of these consumers may actually be *overpaying*. That is, some observers have argued that certain "free" products and services may have *negative* equilibrium prices under competitive conditions, meaning that firms in the relevant markets would *pay consumers* for their attention and the use of their data if faced with sufficiently robust competition.

Other commentators have argued that firms offering zero-price products and services can compete on a variety of nonprice dimensions such as quality and privacy, and that antitrust law can promote consumer welfare in zero-price markets by ensuring that companies engage in these types of nonprice competition. This argument appears to have persuaded regulators at the DOJ. In a February 2019 speech, Makan Delrahim—the head of the Justice Department's Antitrust Division—contended that antitrust law applies "in full" to zero-price markets because firms offering "free" products and services compete on a variety of dimensions other than price.

While many observers accordingly agree that zero-price markets are not categorically immune from antitrust scrutiny, the optimal approach to defining the scope of such markets remains open to debate.

Some commentators have argued that regulators should modify the SSNIP test to account for *quality-adjusted* prices, creating a new methodology called the "small but significant and non-transitory decrease in quality" (SSNDQ) test. According to these academics, decreases in the quality of "free" services (e.g., a decline in the privacy protections offered by a social network) are tantamount to increases in the quality-adjusted prices of those services. Under the SSNDQ test, then, a firm offering "free" goods or services would possess monopoly power if it had the ability to profitably raise its quality-adjusted prices significantly above competitive levels... The SSNIP test as traditionally administered is accordingly "inoperable" in a number of zero-price technology markets."

- 96. Plaintiffs are only aware of one Sherman Act claim for free apps brought against Apple to date, which was brought by Plaintiff's counsel for *Coronavirus Reporter (CAND cv-21-5567-EMC)*. But that case, after transfer to the Northern District for California, was dismissed by the California district judge, who did not recognize a free app monopsony, and declared it would be "futile" to attempt to define one. That case is under appeal to the Ninth Circuit.
- 97. As "Antitrust and Big Tech" argues, the Ninth Circuit's Tyco ruling, and a plethora of other Big Tech friendly west coast law, have implemented the "Chicago School" view on Sherman to the point of obliterating prior "Brown Shoe" SCOTUS precedent. It seems, Apple's forum selection clause largely limits prosecution of Sherman violations, as both

end-users and developers are bound to Ninth Circuit law that simply doesn't conveniently fails to recognize free app markets, amongst others realities of the new economy. Plaintiffs in this case, who are IP holders rather than end-users or DPLA-bound developers, are hopeful Eleventh Circuit law can finally bring a proper resolution to this important matter of national, and international, urgency.

- 98. Plaintiffs intend to present at jury trial SSNDQ tests from experts to demonstrate that free apps are a relevant market. Under the "*Brown Shoe*" test, there is a market for smartphone apps, free or paid. The intent of Congress is clear Sherman Act must be applied to Apple, and "Chicago School" precedent set over the past few decades will not hold up to a jury, or to the Supreme Court.
- 99. It should be noted that while the aforementioned App Store app distribution market may or may not be a "two-sided" transactional marketplace, Plaintiffs specifically deny that the Smartphone App market is two-sided. There is no direct symmetry in transactions between the demand and supply side. Apple could, and indeed did, purchase a weather app for millions of dollars from a developer, but then distributed it for free. In short, an app has a supplier price by its author often millions of dollars and a demand price by consumers often free, or a small amount. Apple is the only merchant of record selling iOS apps to consumers all App Store purchases show as "Apple Inc" on credit card receipts. As such, Plaintiffs allege apple is a monopsony purchaser of iOS apps. Even in the broader smartphone app market, Apple still maintains a monopsony. Although the DPLA does not explicitly declare such, Apple effectively purchases all rights to an app, the same way book publishers or film studios often do with their products.

100. In sum, there is a relevant market for smartphone apps, or alternatively, iOS apps, and this market is separate from any two-sided symmetric distribution via the App Store.

The market is subject to bottleneck constraint, as Apple is the only purchaser of iOS apps, i.e., it is a censor-competitor.

The Relevant Geographic Market is the United States

101. The United States is a relevant geographic market for Smartphone Apps (or, alternatively, iOS Apps). The apps available, and desirable, to consumers vary on a country-by-country basis. Apps are made in different languages and cultural norms to appeal to different countries. Some apps are restricted or illegal in certain countries. Localization, such as currency and time and date formatting, vary by country. A US developer may not want divert limited resources and budget to making an app work in every country, and as a solution, typically will write their app in American English, intended for a United States audience. The developer may value their app solely on the expected revenue to be obtained from US based consumers.

Apple Has Monopoly Power in the Smartphone and iOS App Markets

Market and iOS App Market, causing ongoing harm to competition and injury to consumers, developers, and distributors. Apple's monopoly power is evidenced by its ability to totally censor and control the apps that may be used on the iOS device network. Apple uses monopoly power in the Smartphone market to conduct exclusionary design and deny essential facilities to rivals, in violation of *MCI* and *Aspen* precedent. It routinely grants preferential treatment to its own apps, or those of its cronies and business partners.

- 103. Through its anticompetitive conduct, Apple blocks any app from being directly installed on devices. Nearly every other major computing platform in history, notably including MacOS and Android, allow apps to be directly loaded and installed on devices. The App Market is severely bottlenecked as a result.
- 104. Consumers are harmed by Apple's anticompetitive practices by way of increased prices and reduced output. Apple rejects 40,000 apps per week, representing millions of hours of lost labor. In China, where Android markets thrive, the output of competing Android app stores are nearly an order of magnitude higher than Apple's respective app market.
- 105. In addition, developers are harmed by Apple's conduct. Since Apple is the only buyer of apps a monopsony developers of free apps are underpaid for their work, or entirely censored and paid nothing. Apple would pay zero to Plaintiff for their app a novel distribution app store that would run, as a standard app on an iOS device. It is well known Apple's DPLA doesn't allow competing app stores, as such, Plaintiff does not need to apply to join the DPLA, which would simply move this dispute to the Ninth Circuit and prevent redress from ever occurring.
- 106. Alternatively, Apple is a monopolist in the Smartphone App and iOS App Markets, and promotes its own apps, excluding rivals such as Plaintiff, who have a free app that serves as a distribution app store.
- 107. Once a developer has written an iOS app, it must accept the price Apple pays for it. There is no reasonable alternative. The developer could forego the entire Apple portion of the marketplace, which amounts to foregoing 60% of users and 80% of app sales by

dollar volume. iOS apps are written in Swift/Xcode, and selling to any other buyer on this market would likely require rewriting the app from scratch.

Putative Class Definitions

- 108. Plaintiffs bring this proposed class action pursuant to Fed. R. Civ. P. 23(b)(1), (2), and (3).
- 109. Plaintiffs bring this action on behalf of themselves and the following nationwide classes, for monetary and injunctive relief based on violations of the Sherman Act or RICO, and/or tort, and or direct shareholder claim:
 - All U.S. iOS app distributors who were unable to compete with the App Store due to Apple's exclusionary design, and tying of the App Store to iOS devices.
 - -All intellectual property holders (patent, trademark, and/or trade dress) who suffered censorship, ranking suppression, or lost royalties in Apple's App Store.
- 110. Not included in these proposed classes is the defendant; defendant's affiliates and subsidiaries; defendant's current or former employees, officers, directors, agents, and representatives; and the district judge or magistrate judge to whom this case is assigned, as well as those judges' immediate family members.
- Numerosity: The exact number of the members of the proposed classes is unknown and is not available to the plaintiffs at this time, but upon information and belief, supported by Apple's past statements, the classes will consist of millions of Apple shareholders, citizens, and tens of thousands of independent app distributors, and millions citizens

concerned about Apple device hazards, and therefore individual joinder in this case is impracticable.

- 112. Commonality: Numerous questions of law and fact are common to the claims of the plaintiffs and members of the proposed classes. These include, but are not limited to: a. whether Defendant Cook's \$275 billion wealth transfer to China directly diluted shareholders or violated RICO and other statutory provisions; b. whether there is a relevant antitrust market for app distributors; c. whether iOS devices create negative ecological and/or health externalities; d. whether intellectual property holders are harmed by Apple's exclusionary design; e. Whether competition in the relevant markets has been restrained and harmed by Apple's monopolization, or attempted monopolization, of each market; e. Alternatively, whether Apple has behaved as a monopsonist, or attempted monopsonist, in the relevant markets; f. Whether plaintiffs and members of the proposed classes are entitled to declaratory or injunctive relief to halt Apple's unlawful practices, and to their attorney fees, costs, and expenses; g. Whether plaintiffs and members of the proposed classes are otherwise entitled to any damages, including treble damages, or restitution, and to their attorney fees, costs, and expenses related to any recovery of such monetary relief; and h. Whether plaintiffs and members of the proposed classes are entitled to any damages, including treble damages, or restitution incidental to the declaratory or injunctive relief they seek, and to their attorney fees, costs, and expenses related to any recovery of such monetary relief.
- 113. **Typicality:** Plaintiffs' claims are typical of the claims of the members of the proposed classes. The factual and legal bases of Apple's liability are the same and resulted in injury to plaintiffs and all of the other members of the proposed classes.

- 114. **Adequate representation:** Plaintiffs will represent and protect the interests of the proposed classes both fairly and adequately. They have retained counsel able to engage, and experienced with, complex litigation. Plaintiffs have no interests that are antagonistic to those of the proposed classes, and their interests do not conflict with the interests of the proposed class members he seeks to represent.
- of individual actions for the conduct complained of were undertaken, there likely would be inconsistent or varying results. This would have the effect of establishing incompatible standards of conduct for the defendant. Certification of plaintiffs' proposed classes would prevent these undesirable outcomes.
- 116. **Injunctive and declaratory relief:** By way of its conduct described in this complaint, Apple has acted on grounds that apply generally to the proposed classes. Accordingly, final injunctive relief or corresponding declaratory relief is appropriate respecting the classes as a whole.
- 117. **Predominance and superiority:** This proposed class action is appropriate for certification. Class proceedings on these facts and this law are superior to all other available methods for the fair and efficient adjudication of this controversy, given that joinder of all members is impracticable. Even if members of the proposed classes could sustain individual litigation, that course would not be preferable to a class action because individual litigation would increase the delay and expense to the parties due to the complex factual and legal controversies present in this matter. Here, the class action device will present far fewer management difficulties, and it will provide the benefit of a single

adjudication, economies of scale, and comprehensive supervision by this Court. Further, uniformity of decisions will be ensured.

IV. VIOLATIONS ALLEGED

COUNT I

Sherman Act § 2 Monopoly Maintenance in the iOS App Distribution Market

- 118. Plaintiffs restate, re-allege, and incorporate by reference each of the allegations set forth in the rest of this Complaint as if fully set forth herein.
- 119. This cause of action is brought under Section 2 of the Sherman Act, 15 U.S.C. § 2, which prohibits "monopoliz[ation of] any part of the trade or commerce among the several states, or with foreign nations."
- 120. The iOS App Distribution Market within the U.S. is the product and geographic market relevant to this claim. Alternatively, the US Smartphone App Distribution Market is a relevant market. Additionally, the US Smartphone App market, or iOS App Market, is a relevant market to this claim.
- 121. Apple has monopoly power in the iOS App Distribution Market within the U.S. through the Apple App Store. Likewise, Apple has monopoly power in the U.S. Smartphone App Distribution Market within the U.S. Apple has monopoly power in the US Smartphone App market and the iOS App Market.
- 122. Apple has unlawfully maintained its monopoly power through the conditions that it has placed on the licensing of the iOS ecosystem IP, Apple App Store and other Apple services, including but not limited the DPLA with app developers, the SLA with end-users, and the exclusionary design of iOS. These conditions provide the Apple App Store with preferential placement on mobile devices, limit the distribution of iOS apps through means

- other than the Apple App Store, impose technological obstacles on both end users and app developers, and deter distributor-developers from implementing competing app stores.
- 123. Apple's conduct has substantial anticompetitive effects, including increased prices to consumers and costs to developers, reduced innovation and quality of service, and lowered output of apps and app quality.
- 124. Apple's conduct affects a substantial volume of interstate commerce.
- 125. Apple has engaged in a continuous course of unlawful anticompetitive conduct.
- 126. There are no procompetitive justifications for Apple's conduct. Alternatively, to the extent that any such procompetitive benefits exist, they are outweighed by the anticompetitive effects of Apple's conduct and could have been achieved through less anticompetitive and less harmful means.
- Apple's anticompetitive conduct has harmed competition and harmed the general economies and a substantial number of residents of Florida in a manner the antitrust laws were intended to prevent. Residents of the Florida have paid more for iOS apps than they would have paid in a competitive market. Apple's unlawful restraints of trade extinguished consumers' freedom to choose between the Apple App Store and lower-cost and better market alternatives that would have been available had Apple not restrained competition. Florida residents were further injured because Apple's establishment and maintenance of supra-competitive pricing has caused a reduction in the output, supply, quality, and innovation of iOS apps, all of which would have been more abundant in a competitive market.
- 128. Plaintiff was directly injured as its innovative app store cannot be launched this month, as Apple does not permit competing app stores to exist.

129. As a result of Apple's anticompetitive conduct, Plaintiff, developers, end users, and Florida residents and the national app store economies have suffered and continue to suffer damages.

COUNT II

Sherman Act § 1 Unreasonable Restraints of Trade Concerning the Smartphone App
Distribution Market and Smartphone App Market

- 130. Plaintiffs repeat and reallege every preceding allegation of this Complaint as if fully set forth herein.
- 131. This cause of action is brought under Section 1 of the Sherman Act, 15 U.S.C. § 1, which prohibits "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations."
- 132. Apple forces developers to sign a DPLA that unreasonably restrict competition in the iOS App Distribution Market and US Smartphone App Market. This forces inventors like Plaintiff Coring to abandon any competing App Stores. Likewise, it grants Apple full discretion to curate, aka censor, competing apps. This creates a bottleneck and vastly decreases consumer choice.
- 133. Apple's conduct has substantial anticompetitive effects, including increased prices to consumers and costs to developers, reduced innovation and quality of service, and reduced output of apps.
- 134. These agreements serve no legitimate or procompetitive purpose that could justify their anticompetitive effects, and thus unreasonably restrain competition in the iOS App

Distribution Market and/or Smartphone App Market. Alternatively, to the extent that these agreements provide any procompetitive benefits, those benefits are outweighed by the anticompetitive effects of the agreements and could have been achieved through less anticompetitive and less harmful means.

- 135. Apple's conduct affects a substantial volume of interstate commerce.
- 136. Apple has engaged in a continuous course of unlawful anticompetitive conduct.
- 137. Apple's anticompetitive conduct has harmed competition and harmed the national economy and a substantial number of residents of Florida in a manner the antitrust laws were intended to prevent. Potential customers of Plaintiff's app store have paid more for iOS apps than they would have paid in a competitive market app store. Apple's unlawful restraints of trade extinguished consumers' freedom to choose between the Apple App Store and lower-cost and better market alternatives that would have been available had Apple not restrained competition.
- 138. As a result of Apple's anticompetitive conduct, Plaintiff and the state and national economies have suffered and continue to suffer damages. Additionally, Plaintiffs suffered and continue to suffer irreparable injury for which no adequate remedy at law exists and therefore seek an injunction ending Apple's anticompetitive conduct.

COUNT III

Florida Antitrust Act, Fla. Stat. § 542.22

139. Plaintiffs repeat and reallege every preceding allegation of this Complaint as if fully set forth herein.

- 140. Plaintiff seeks all remedies available under the Florida Antitrust Act including, without limitation, the following:
- 141. Damages for injury to the Coring Distribution App Store;
- 142. Injunctive and other equitable relief pursuant to Fla. Stat. § 542.23;
- 143. Costs and attorney's fees pursuant to Fla. Stat. § 542.23.

COUNT IV

The Florida Deceptive and Unfair Trade Practices Act, Fla. Stat. § 501.204

- 144. Plaintiffs repeat and reallege every preceding allegation of this Complaint as if fully set forth herein.
- 145. The acts and practices alleged constitute unfair methods of competition in violation of The Florida Deceptive and Unfair Trade Practices Act, Fla. Stat. § 501.211. Banning all potential distributors and developers from directly selling apps to 80% of the Florida population using iOS devices would be akin to blocking sales of books, movies, or TV programming to these individuals, and is therefore unethical.
- 146. Further, Defendants' actions offend established public policy and are immoral, unethical, oppressive, unscrupulous, or substantially injurious to Plaintiff, developers, and consumers in the State of Florida in violation of Fla. Stat. § 501.204 et seq.
- 147. Per the statute, "Unfair methods of competition, unconscionable acts or practices, and unfair or deceptive acts or practices in the conduct of any trade or commerce are hereby declared unlawful."
- 148. Anyone aggrieved by a violation of this part may bring an action to obtain a declaratory judgment that an act or practice violates this part and to enjoin a person who

has violated, is violating, or is otherwise likely to violate this part. In any action brought by a person who has suffered a loss as a result of a violation of this part, such person may recover actual damages, plus attorney's fees and court costs as provided in s. 501.2105.

COUNT V DENIAL OF ESSENTIAL FACILITY

- 149. Plaintiffs restate, re-allege, and incorporate by reference each of the allegations set forth in the rest of this Complaint as if fully set forth herein.
- 150. Most essential facility cases considered by district courts during the past decade rely on the four prong test enunciated in *MCI Communications Corp. v. American Tel. & Tel. Co.*, 708 F.2d 1081 (7th Cir.), cert. denied, 464 U.S. 891 (1983), a case challenging AT&T's use of local telephone networks to thwart competition in the long distance telephone service market. There, the court held that "to establish liability under the essential facilities doctrine [a plaintiff must show]: (1) control of the essential facility by a monopolist; (2) a competitor's inability practically or reasonably to duplicate the essential facility; (3) the denial of the use of the facility to a competitor; and (4) the feasibility of providing the facility." Id. at 1132-33.
- 151. Apple's conduct completes all four elements of the MCI test.
- 152. Apple competes with apps in the US Smartphone App and iOS App markets. Apple is a monopolist & monopolist in these markets. Alternatively, these markets are downstream from the US Smartphone market, where it is a monopolist. It is also a monopolist in the iOS App Distribution Market.
- 153. Apple controls an essential facility necessary to compete in all of these markets.

- app developer (inclusive of app distributors) is unable compete in the marketplace of apps, or of app stores, without the necessary infrastructure. Apple restricts the entire app store and smartphone app marketplace (both sides, institutional and retail) by excluding developers and rival app stores from necessary iOS SDK and API calls to implement their software.
- 155. Apple engages in exclusionary behavior that denies essential facilities to Plaintiffs and other app store and app developers. Apple routinely the essential facility of iOS API and SDK when it denies apps like Parler or competing app stores. Contractually, it denies access to the iOS essential facilities when it requires developers to sign the restrictive DPLA App Store policies.
- 156. Because Apple has its own apps in the competing in the US Smartphone Apps markets, and has its own App Store, by definition Apple excludes competitors. Apple does so by leveraging its control over the iOS App Store, operating system, and hundreds of millions of physical iPhone devices.
- 157. Competing app developers and rival app stores are unable to reasonably or practically duplicate the entire infrastructure for the iOS API and SDK. Duplicating the entire iPhone network effect is about as feasible as recreating a mountain in reference to binding caselaw from *Aspen Skiing Co* (472 U.S. 585, 1985). Apple's exclusionary design practices, blocking programmers from accessing a network of hundreds of millions of computers, is truly unprecedented and as unethical as a book publisher banning books.

- 158. In fact, providing tools to access a computing platform's API and SDK is exactly what Apple has done for forty years with the Mac product ecosystem, a respected and successful computing platform.
- 159. Apple's denial of access to iOS users, via API and SDK restrictions, has no legitimate business purpose, and serves only to assist Apple in maintaining its unlawful monopoly position in the relevant markets.
- 160. Apple's conduct affects a substantial volume of interstate as well as foreign commerce. Apple's conduct has substantial anti-competitive effects, including increased prices and costs, reduced innovation and quality of service, and lowered output.
- As an app store developer, Plaintiffs have been harmed by Apple's anti-competitive conduct in a manner that the antitrust laws were intended to prevent. Plaintiffs have suffered and continue to suffer harm and irreparable injury, and such harm and injury will not abate until an injunction ending Apple's anti-competitive conduct issues.

COUNT VI (Sherman Act § 1)

ILLEGAL TYING OF THE APP STORE TO THE US SMARTPHONE DEVICE MARKET 162. Plaintiffs restates, re-alleges, and incorporates by reference each of the allegations

set forth in the rest of this Complaint as if fully set forth herein.

- 163. Apple's conduct violates Section 1 of the Sherman Act, which prohibits "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations".15 U.S.C. § 1.
- 164. Through its End User Agreement with iOS users, and the DPLA, Apple has unlawfully tied its iOS devices in the US Smartphone device market the use of its App Store, in the Smartphone App Distribution market.

- 165. Apple has sufficient economic power in the tying market, the Smartphone Device and/or iOS Device market, because it holds 65% and 100% of these markets, respectively. Moreover, the iOS Smartphone Device user often is locked in to their device, or has substantial barriers to exit. As such, the iOS user has no choice but to accept the App Store offerings (Apple's curated apps, favoring their own competing products), which are mandated by the EULA.
- 166. Apple is able to unlawfully condition access to iOS device to the use of a second product—App Store app marketplace. Through its End User License Agreement and unlawful policies, Apple expressly conditions the use of its devices on its "walled garden" App Store which creates a severe bottleneck constraint on both the developer and consumer side of the Smartphone App markets, or iOS App markets, alternatively. This amounts to a *per se* unlawful tying arrangement, and a dangerously inefficient one that denies users the benefit of the multi-trillion dollar device network they collectively invested in.
- 167. The tying product, Apple's iPhone Smartphone, is distinct from the tied product, Apple's App Store. App developers such as Plaintiffs have apps, and their own App Place "app store" that cannot complete a product launch, but for Apple's EULA and DPLA restrictions. In other words, end users and developers are coerced into using the App Store, and the competition of our national app markets suffers the consequences. Apple's unlawful tying arrangement thus ties separate products that are in separate markets and coerces Plaintiffs and third-party end users to rely on both of Apple's products.

- Apple has thus engaged in a *per se* illegal tying arrangement and the Court does not need to engage in a detailed assessment of the anti-competitive effects of Apple's conduct or its purported justifications.
- 169. In the alternative only, even if Apple's conduct does not constitute a *per se* illegal tie, an analysis of Apple's tying arrangement would demonstrate that this arrangement violates the rule of reason and is illegal by coercing end-users into using its App Store, notary stamps, and onboarding software. Apple's only defense, of a safety competitive advantage, is defeated by cutting-edge app store replacements, such as the App Place, that have vastly superior safety.
- 170. Apple's conduct harms those Plaintiffs and class members which, as a direct result of Apple's anti-competitive conduct, are prohibited from offering competing app stores, are receiving infra-competitive fees on institutional app sales to monopsonist Apple, or cannot sell their work-product to consumers directly, as they lack the ability to circumvent the DPLA and iOS exclusionary design, but for a court order.
- 171. As app developers that offer a competing app store, Plaintiffs have been been foreclosed from competing with Apple directly as a result of Apple's unlawful tie and restrictive agreements. Of note, Plaintiff has never applied for nor been in privity to any agreement with Apple, Inc, and this is fortunate, as it would cause a forum selection invocation that, at least thus far, has defeated numerous valid Apple antitrust claims.
- 172. The U.S. Supreme Court has held that "the answer to the question whether one or two products are involved turns not on the functional relation between them, but rather on the character of demand for the two items." Thus, the most important factor in determining whether two distinct products are being tied together is whether customers want to purchase

the products separately. If customers are not interested in purchasing the products separately, there is little risk the tie could foreclose any separate sales of the products. Here, the tied products meet the SCOTUS requirement for consumer interest. Clearly, consumers are interested in purchasing apps separately from smartphones. Customers in China evidence that competing app stores have great demand.

- 173. A party seeking to defend such a *per se* tying arrangement on the basis of competitive justifications bears a heavy burden of proof; the defense is difficult to establish and has been successful only under limited circumstances. For these reasons, the Court should approve a Preliminary Injunction ending this illegal tie, filed simultaneously with this Amended Complaint.
- 174. Plaintiffs have been harmed by Apple's anti-competitive conduct in a manner that the antitrust laws were intended to prevent. Plaintiffs suffer harm and irreparable injury, and such harm and injury will not abate until an injunction ending Apple's anti-competitive conduct issues. To prevent these ongoing harms, the Court should permanently enjoin the anti-competitive conduct complained of herein.

COUNT VII 35 U.S.C. § 271 PATENT INFRINGEMENT

- 175. Plaintiffs repeat and re-allege each and every allegation contained herein as if fully stated under this count.
- 176. Apple has directly infringed at Claims 7 & 8 of the '847 patent, and contributorily infringed and induced others to infringe at Claims 7 & 8 of the '847 Patent by making, having made, importing, using, offering for sale, and/or selling apps on the App Store that are performing, implementing, and carrying out, processes and methods specified in the patent, in violation of 35 U.S.C. § 271(a), (b) and (c).

- 177. On information and belief, Apple's infringement is willful. Apple's App Store IP team has been aware of the preceding '698 patent and its infringement thereof since at least January 2016, and upon information and belief, since approximately August 2015 when the patent's inventor notified Apple of the infringement. Apple has been made aware of the reissue patent process, and issuance, and the fact that the App Store still publishes infringing apps.
- and apportionment of direct/contributory infringement. In essence, if a jury determines Apple is a monopoly seller/merchant, or monopsony buyer of infringing apps, the company is liable for 100% of direct infringement royalty losses. On the other hand, if the jury determines Apple merely is a transaction supply chain platform, damages for lost royalties may be limited to 30% (Apple's commission on IAP sales) of lost royalties. Plaintiff alleges that Apple is in fact the proper legal seller of apps, as a monopolist/monopsonist, and that the contrasting DPLA terminology is legally void.
- 8 of the '847 Patent, and will continue to be harmed unless and until these acts of infringement are enjoined and restrained by order of this Court. Coring has no other adequate remedy at law to redress Apple's continuing acts of infringement. Upon information and belief, the hardships that would be imposed upon Apple by an injunction are less than those faced by Coring should an injunction not issue. Furthermore, the public interest would be served by issuance of an injunction. Accordingly, Coring is entitled to permanent injunctive relief against such infringement pursuant to 35 U.S.C. § 283.

180. As a result of Apple's acts of infringement, Coring has suffered and will continue to suffer damages. Plaintiff is entitled to compensation for such damages pursuant to 35 U.S.C. § 284 in an amount to be determined at trial, estimated to exceed \$80 million USD before treble damages.

COUNT VIII - PERMANENT INJUNCTION

RESTRAINING SHERMAN ACT VIOLATIONS

- 181. The Court shall enter a permanent injunction, enjoining and restraining Defendant Apple from further anticompetitive restraints on the smartphone app and smartphone app distribution markets, as regulated by the Sherman Act. Specifically, the permanent injunction shall enjoin Apple from:
- 182. Requiring developers to assent to contracts of adhesion such as the DPLA
- 183. Using exclusionary design in iOS to block competing app stores
- 184. Maintaining a monopoly or monopsony on the US smartphone app market or iOS app market.

WHEREFORE, The Plaintiffs and class members respectfully request that this Honorable Court:

A. Certify this case as a developer class action lawsuit and that it certify the proposed federal law classes on a nationwide basis for app store competitors, and developers who seek access to these innovative app stores.

B. Order damages for:

- a. Willful patent infringement, at treble punitive value of \$240 million.
- b. A compensation fund for censored distributors, and app developers, if so determined by jury, to cover the competition injury created by lost app sales and

- commissions amounting to an estimated \$275 billion USD depending upon class participation, and including Plaintiff's own App Place.
- C. Issue a permanent injunction restraining Defendant Apple from tying app distribution to iOS devices, blocking competing app stores, and blocking essential facilities from rival app developers.
- D. Issue a finding that Apple has infringed literally and/or under the doctrine of equivalents, Claims 7 & 8 of the '847 Patent; Issue a finding that Apple's infringement has been willful; Issue a permanent injunction that Apple be permanently enjoined from making, using, offering for sale, selling, causing to sell, importing, exporting, supplying and/or distributing within, to and/or from the United States, or over the internet or on any app, any software infringing upon the '847 patent; That Coring be awarded pre-judgment interest and post-judgment interest at the maximum rate allowed by law, including an award of prejudgment interest, pursuant to 35 U.S.C. § 284, from the date of each act of infringement of Claims 7 & 8 of the '847 Patent to the day a damages judgment is entered, and a further award of post-judgment interest, pursuant to 28 U.S.C. § 1961, continuing until such judgment is paid, at the maximum rate allowed by law; That the Court order an accounting for damages through judgment and post-judgment until Apple is permanently enjoined from further infringing activities; That the Court award enhanced damages pursuant to 35 U.S.C. § 284; the Court award supplemental damages for any continuing post-verdict infringement up until Apple is permanently enjoined from further infringing activities; That the Court award a compulsory future royalty in the event an injunction is not awarded.
- E. Grant any further relief as may be fair and just.

Respectfully submitted, this 15th day of December 2021.

/s/ Keith Mathews
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CERTIFICATE OF SERVICE

I, Keith Mathews, do declare as follows:

I certify that a copy of the foregoing COMPLAINT FOR DAMAGES AND INJUNCTIVE RELIEF was served upon all parties, in accordance with applicable service of process guidelines.

Executed on this 15th day of December 2021.

/s/ Keith Mathews
Keith Mathews